

WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

[The Marine Division, I. R. TANNHILL in charge]

NORTH ATLANTIC OCEAN, AUGUST 1938

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Atmospheric pressure.—The pressure was slightly to moderately in excess of normal over the eastern North Atlantic, likewise over the middle of the ocean from the vicinity of the Grand Banks southward. Near the United States coast the pressure was above normal from New Jersey southwestward. There were moderate deficiencies of pressure from New England and Nova Scotia southeastward and southward to the central and eastern West Indies and also in the vicinity of southern and western Greenland.

The highest pressure yet reported by a vessel during the month was 30.47 inches, by the British motor tanker *Wellfield*, near 37° north, 33° west, during the forenoon of the 11th. There was very low pressure near the northwestern tip of Yucatan early on the 26th, in connection with the most important of the tropical disturbances; the American steamship *Agwister* reported 28.92 inches. Elsewhere the lowest reported pressure was 29.24 inches on the American liner *Mormacide*, in the northern part of the North Sea, 58° N., 5° E., about noon of the 20th. Several land stations of the British Isles and Norway noted somewhat lower readings during the period from August 17 to 21.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, August 1938.

Station	Average pressure	Departure	High-est	Date	Low-est	Date
	Inches	Inch	Inches		Inches	
Julianehaab, Greenland.....	29.74	−0.08	30.14	31	29.36	2
Reykjavik, Iceland.....	29.83	+0.02	30.24	29	29.26	18
Lerwick, Shetland Islands.....	29.91	+0.11	30.36	2, 3	29.00	17
Valencia, Ireland.....	30.00	+0.08	30.36	2	29.18	19
Lisbon, Portugal.....	30.03	+0.01	30.12	1, 4, 5, 7	29.83	28
Madeira.....	30.09	+0.06	30.30	17	29.97	6
Horta, Azores.....	30.29	+0.09	30.40	11	30.08	22
Belle Isle, Newfoundland.....	29.89	−0.00	30.30	17	29.58	23
Halifax, Nova Scotia.....	29.95	−0.06	30.24	21	29.44	25
Nantucket.....	29.97	−0.02	30.20	21	29.57	24
Hatteras.....	30.04	+0.04	30.24	14	29.79	25
Bermuda.....	30.10	−0.04	30.24	5, 7, 8	29.94	26
Turks Island.....	30.00	−0.04	30.09	13	29.93	24
Key West.....	30.01	+0.03	30.14	14	29.89	24
New Orleans.....	30.04	+0.06	30.23	4	29.89	1

NOTE.—All data based on a. m. observations only, with departures compiled from best available normals related to time of observation, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

Extra-tropical cyclones and gales.—On various dates, in widely scattered parts of the ocean to northward of the 35th parallel, fresh gales were met by a few vessels, but no reports are found in these areas of any wind force exceeding 8. The most notable low system of the month was indicated on the morning of the 14th as extending from southern Greenland to North Dakota, with three distinct centers, each of considerable energy. By the 16th the system had moved eastward so that it reached from Lapland to Baffin Land, with an important center just north of Scotland. By the 19th this particular center was

over northern Sweden, but the succeeding center attained marked strength near the Shetland Islands, whence it advanced in turn to the Scandinavian peninsula. Table 1 shows a reading of exactly 29 inches at Lerwick on the 17th, but even lower readings were noted at some Norwegian stations, namely, 28.94 at Bronno, about noon of the 20th, and 28.91 during the night preceding at Ingöy. From mid-Atlantic eastward and northeastward several vessels were involved in moderate or fresh gales in connection with the different centers of this system.

An energetic squall over the western part of Long Island Sound during the afternoon of the 24th capsized a few small sailboats, but it is thought that all on these craft were rescued.

Tropical disturbances.—Elsewhere in this issue may be found an account of the three tropical disturbances of August; these affected parts of the Caribbean Sea and Gulf of Mexico and a small portion of the Atlantic Ocean itself close to the Leeward Islands and the Greater Antilles. An accompanying chart indicates the tracks of these disturbances.

As the American steamship *West Isleta* encountered the first of these disturbances in the eastern Caribbean during the night of the 7–8th, it met “heavy squalls of hurricane intensity.” The second disturbance, when it had reached the Gulf of Mexico, was the cause of force-11 winds, met by the American steamer *John D. Archbold*, on the 14th.

The third and most intense storm has already been mentioned in the text under “Atmospheric pressure.” It seems to have been particularly severe when near the northwest tip of Yucatan, on the morning of the 26th. The conditions of this day are shown on chart IX. Reports of full hurricane intensity have come from two American steamships, *Agwistar* and *Mexico*, which were near Yucatan that morning; and a message from Nicaraguan motorship *Sama*, which encountered the storm in the southwestern part of the Gulf of Mexico the next night, indicates that hurricane force persisted over the gulf for fully 18 hours.

Fog.—Ordinarily fog over the North Atlantic decreases in amount from July to August. However, this year there was about as much, on the whole, in the latter month. While there was less fog to the southeastward of Nova Scotia, in the Gulf of St. Lawrence, and along the chief lanes between 45° and 35° west longitude, yet between the 35th meridian and northwestern Europe there was more fog than in July.

In general, the August foginess this year was considerably greater than usual for the month, particularly in the eastern portion to northward of the 45th parallel.

The leading 5° squares and the number of days with fog in these squares are: the westernmost parts, 40° to 45° N., 65° to 70° W., with 20 days; the region over or near the Grand Banks, 45° to 50° N., 45° to 50° W., with 17 days; the eastern parts, 45° to 50° N., 20° to 25° W., with 16 days. The eastern parts had but little fog between the 15th and the 25th of August, while the westernmost experienced very little after the 23d.